

## Heat Stroke: A Survivors' Story

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**S**teve Myers walked into his front yard. It was hot, but nothing unusual for July in Georgia. A competitive swimmer, he'd lived in the southeast for years and was used to the heat and humidity, probably more so than others, or so he thought. Suddenly his world began to spin and moments later went black as he fell unconscious to the ground. He'd suffered heat stroke!

A neighbor saw Steve fall and called for help. The ambulance got to his house quickly but as Steve regained consciousness, he panicked and started fighting with the emergency medical technicians.

"I had to be sedated at the scene," he said. "I remember thinking 'I can't breathe, I'm having a heart attack!' I clutched my throat and collapsed."

Fortunately, Steve lived only a mile away from a regional university hospital, where doctors used a cooling blanket and circulated chilled water through his system to lower his 103-degree body temperature. Steve also was suffering from rhabdomyolysis, a condition where his skeletal muscles broke down and were delivered into his bloodstream, clogging his kidneys and liver. This problem caused him to stop breathing; after he was placed on a respirator, Steve ultimately fell into a coma. When he awoke three weeks later, he faced a long, tough battle to recovery.

How could a man who normally acclimated well to hot, humid weather so unexpectedly suffer heat stroke? The answer lies in the days just before his heat injury. Steve, an environmental engineer with the U.S. Army Corps of Engineers Savannah, Ga., District, had been at Fort Benning, Ga., investigating an accidental fatality at a dormitory rehabilitation project. He'd spent much of his time outdoors in the unusually hot weather without ready access to water or shade. The cumulative effects of days of dehydration, exhaustion and hotter-than-normal temperatures set him up for a heat injury.

There were other contributing factors as well. At age 40, Steve was less able to handle the heat and heavy workload than when he was younger. Fatigue also played a role. While Steve was hospitalized, doctors found he'd been suffering from a previously undiagnosed sleep disorder. His poor rest and the exhaustion caused by his work made him more vulnerable to heat stroke.

Steve was fortunate to have survived. He spent 42 days in the hospital undergoing physical therapy after he awoke from the coma. It was weeks before he could sit up or walk on his own. Only during his last week in the hospital did Steve's kidneys begin to function again, and he suffered nerve damage that makes walking painful. Still, he's alive and, after months of outpatient rehabilitation, back at his job.

Grateful for having survived, Steve knows Soldiers often face the same dangers during training stateside or when deployed to hot locales such as Iraq. He shares his story to encourage Soldiers to watch closely for the signs of heat injury in themselves and their buddies. Because of what he went through, Steve knows heat injuries can kill or leave victims with permanent health problems, things no Soldier wants to experience.

## What is Heat Stroke?

Heat stroke occurs when the body's temperature rises rapidly, causing the sweating mechanism to fail and rendering the body incapable of cooling itself. Body temperature in heat stroke victims can rise to 106 degrees or higher within 10 to 15 minutes, causing death or permanent disability if emergency treatment isn't provided immediately.



Warning signs:

- An extremely high body temperature (above 103 degrees)
- Red, hot and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness

What to do:

- Get medical assistance as soon as possible and move the victim to a shady area.
- Cool the victim rapidly using whatever methods are available. For example, immerse the victim in a tub of cool water; place the person in a cool shower; spray the victim with cool water from a garden hose; sponge the person with cool water; or, if the humidity is low, wrap the victim in a cool, wet sheet and fan him or her vigorously.
- Monitor body temperature and continue cooling efforts until body temperature drops to between 101 to 102 degrees.
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.
- Don't give the victim fluids to drink.

## FYI

For more information on heat injury prevention, visit the U.S. Army Combat Readiness Center Web site at <https://crc.army.mil>, the U.S. Army Center for Health Promotion and Preventive Medicine Web site at <http://chppm-www.apgea.army.mil/heat/> or the U.S. Army Research Institute for Environmental Medicine Web site at <http://www.usariem.army.mil/heatinjury.htm>.